

REMARKS

The Office Action of July 2, 2003 has been carefully considered. Reconsideration of this application, as amended, is respectfully requested. Claims 1-30 are pending in this application. Of these, claims 1, 9, 18, 21, 25, and 29 are independent claims.

Applicant appreciates the detail in which the drawings and specification of this Application were reviewed.

This Amendment amends claims 1, 9, 18, 21 and 29 as discussed in more detail below in section 2.

In addition, this Amendment amends the drawings, and specification, as discussed in detail below in section 1.

1. Response to Rejection Objection Of The Specification And Drawings

The Office Action, in sections 1-6 on pages 2-3, objects to the specification and drawings for the following reasons enumerated below:

1) The disclosure is objected to because of unclear labeling on page 13, line 3, of Applicant's specification, relating to the general purpose computer 210 not being shown in Figure 1. Responsive thereto Applicant respectfully amends the Specification at page 13, line 3 as suggested in the Office Action to have that remark refer to Figure 2.

2) The disclosure is objected to because of an inconsistency on page 18, line 5 and page 20, line 13 of Applicant's specification. Responsive thereto Applicant amends the Specification at page 18, line 5 and page 20, line 13 to correct the inconsistencies.

3) The drawings objected to for failing to include reference sign(s) 202 mentioned in the description. Responsive thereto Applicant submits a replacement sheet for Figure 2 with the changes described above in the Amendments To the Drawings section.

4) The drawings are objected to because reference character 137 points to duplicate elements. Responsive thereto Applicant submits a replacement sheet for

Figure 2 with the changes described above in the Amendments To the Drawings section. In addition, Applicant amends the specification at page 16, line 5, to label pointing device as element 138 to be consistent with amended Figure 2.

5) The drawings are objected to because "Processor 205" on page 16, line 13 is inconsistently labeled. Responsive thereto Applicant amends the specification at page 16, line 13, to label Processor as element 206 to be consistent with Figure 2 and its other references in the specification using reference number 206.

6) The drawings are objected to because reference numbers 700 in Figures 7A and 7B and 990 in Figure 9 are not referred to in the specification. Responsive to the objection to label 990 in Figure 9, Applicant submits a replacement sheet for Figure 9 with the changes described above in the Amendments To the Drawings section. Responsive to the objection to label numbers 700 in Figures 7A and 7B, Applicant includes a reference thereto by amending the specification at page 21, line 17 using subject matter disclosed at page 10, lines 1-3 in the Brief Description of the Drawings.

2. Response to Rejection Under 35 USC 102 and 103

(2.A) The Office Action in sections 8-22 on pages 4-8 rejects claims 1, 2, 4, 6-9, 15-17, and 21-24 under 35 USC 102(b) as being anticipated by Chevrette et al., U.S. Patent No. 5,774,179 (hereinafter Chevrette).

Chevrette discloses a method for fast microscanning that uses a movable focus lens as shown in Figure 1d and described in column 6, line 59 through column 7, line 9. As shown in Figure 1d, microscanning involves moving a lens a distance of a half a pixel pitch to record a microscanned image (e.g., the four single number images in Fig. 1d) and "interlacing" the four microscanned images to arrive at the final image (e.g., the large image with numbers 1-4 in it). This has the effect of increasing the spatial resolution (i.e., reciprocal sampling interval on object plane, e.g., DPI) and the pixel resolution (i.e., number of pixels). In the example in Figure 1d of Chevrette, the four single-number images have a lower spatial and a lower pixel resolution than the final image with numbers 1-4.

Similar to microscanning described by Chevrette in which the interlacing of

images increases the interlaced image's pixel resolution over the recorded images, patching of images as claimed by Applicant increases the pixel resolution of the plurality of recorded images relative to the recorded images. However, unlike microscanning described by Chevrette, patching of images to produce a composite image as claimed by Applicant does not change the spatial resolution of the composite image relative to the recorded images. This is because the spatial resolution of the final image involves patching together recorded images (using various known tiling, mosaicing, and/or stitching algorithms) to produce a composite image at their regions of overlap. (See Figures 3A, 3B, and 3C and Applicant's disclosure at page 18, lines 6-14.)

Referring now to the claims, Applicant amends independent claims 1, 9, and 21 to distinguish microscanning as described by Chevrette and more clearly set forth mosaicing as described by Applicant. In particular, Chevrette produces an interlaced image with greater pixel and spatial resolution than the recorded images. In contrast, Applicant's system and method produces a composite image with greater pixel resolution by patching together recorded images at regions of overlap. Support for these amendments is set forth in Figures 3A, 3B, and 3C and Applicant's disclosure at page 18, lines 6-14.

Accordingly, Applicant respectfully submits that independent claims 1, 9, and 21 as amended are patentably distinguishable over Chevrette because Chevrette interlaces recorded images and therefore fails to patch together recorded images at regions of overlap to produce a composite image as claimed and described by Applicant. Insofar as claims 2, 4, 6-8, 15-17, and 22-24 are concerned, these claims depend from one of now presumably allowable independent claims 1, 9, or 21 and are also believed to be in allowable condition.

(2.B) In addition, the Office Action in sections 29-37 on pages 11-14 rejects claims 3, 5, and 10-14 under 35 USC 103(a) as being unpatentable over Chevrette. There is no need to specifically address the merits of these claims over Chevrette because they depend from one of independent claims 1 or 9 which are clearly patentable for the reasons set forth above.

(2.C) Further, the Office Action in sections 23-28 on pages 9-11 rejects claims 18-20 and 29-30 under 35 USC 102(e) as being anticipated by Meyers, U.S. Patent

No. 6,137,535 (hereinafter Myers).

In response thereto Applicant amends claims 18 and 29 to reflect that unlike Myers, Applicant's claimed image acquisition system and method therefor include at least one lens of a plurality of cameras that is adapted to shift relative to at least another lens of the plurality of cameras to adjust the view of the area it records. Support for these amendments is found on page 26, lines 1-18.

More specifically, Myers discloses a compact digital camera formed with a lenslet array. While being compact, the lenslet array disclosed by Myers is fixed and may not be adjustable as is the image acquisition system described and claimed by Applicant.

Unlike Myers, Applicant describes and claims an image acquisition system that includes a plurality of cameras that are advantageously independently adjustable. This limitation is set forth in amended claims 18 and 29 in that the plurality of cameras includes at least one camera with a lens that is adapted to shift relative to at least another lens of another of the plurality to adjust the view it records.

Accordingly, Applicant respectfully submits that independent claims 18 and 29 as amended are patentably distinguishable over Myers because the single camera with a lenslet array is not adjustable in the manner claimed by Applicant. Insofar as claims 19 and 30 are concerned, these claims depend from one of now presumably allowable independent claims 18 or 29 and are also believed to be in allowable condition.

3. Allowable Claims

Sections 38-39 on page 15 of the Office Action indicates that claims 25-28 are allowed. The undersigned appreciates this indication of allowable subject matter.

4. Fee Authorization And Extension Of Time

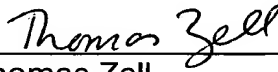
No additional fee is believed to be required for this amendment or response, however, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation

Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

5. Conclusion

In view of the foregoing remarks, reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is hereby requested to call Attorney for Applicant(s), Thomas Zell.

Respectfully submitted,



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Date: September 29, 2003

Attachments: